Overview of PG&E's Federal Stimulus Activities

Road to Recovery July 8, 2009



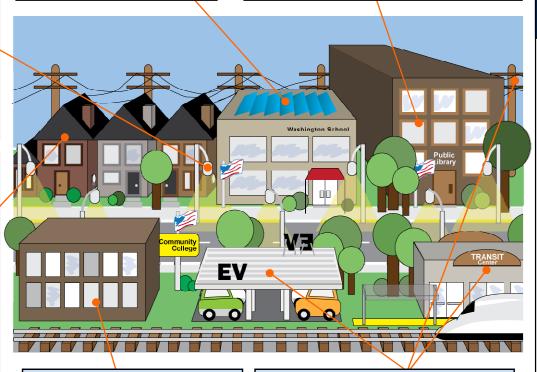
ARRA funds provide a unique opportunity to expand Energy Efficiency and Renewables in communities

Rebates and incentives on energy efficiency and solar for schools

Rebates and incentives for energy efficiency and renewables on local government buildings

Rebates or turnkey replacement of municipalowned LED street lights

Rebates and incentives for residential energy efficiency, including multi-family and low income residential



PowerPathway job creation toolkit and Green Jobs primer for communities

Future smart grid, renewables, and charge point infrastructure enhancements

Benefits from helping municipalities access ARRA funds

- Maximize energy efficiency impact
 - Help municipalities access and effectively spend the ARRA funds allocated to them
 - Use PG&E's energy efficiency rebates and incentives to supplement ARRA funds
 - Use PG&E's existing programs and infrastructure to rapidly deploy ARRA funds
- Build long-term sustainable infrastructures
- Create goodwill and expand breadth of relationships with communities and state agencies



We presented a number of offerings to support our communities for Formula Block Grants

Letters of Support

Grant writing

Sales engineering support

Turnkey LED street light replacement

Rebates and incentives

Templates and modules

Municipal EE match-making and direct install

Description: Support Specific to ARRA

- Letters from PG&E that can be included in a community's application for DOE formula block grants
- Support from PG&E grant writer to draft Energy Efficiency Conservation Block Grant applications
- Support from PG&E sales engineers to evaluate and scope potential energy efficiency projects
- A "turnkey" approach to replace high pressure sodium streetlights with LEDs

Description: Business as usual

- Business as usual rebates, incentives, and project support for energy efficiency initiatives
- Provided "copy and paste" language that a community can use to complete the project summary section of the application
- Match-making with approve EE direct install subcontractors and approved EE subcontractors for municipal buildings EE measures

PG&E's integrated approach accelerates the reliable deployment of smart grid technologies

Italics =

Potential demonstration project



Standards definition

- PG&E plays a broader role in shaping and accelerating the standards that will underlie future smart-grid implementations
- Expands upon PG&E's proven leadership role in shaping standards
- Includes:
 - Accelerated standards development







Testing facilities

- PG&E expands and accelerates its plans for a fully-functional, extensible testing facility to enable rapid prototyping and testing of smart-grid technologies
- Accelerates technology development and ensures standards compliance early on
- Builds upon PG&E's state-of-the-art offgrid testing facilities
- Includes:
 - Expanded smart grid test facility

Pilots

- PG&E implements tested technologies in a real-world setting to demonstrate value of the end-to-end smart grid
- Partnerships spanning the smart-grid ecosystem ensure that insights are scalable
- Includes:
 - HAN demonstration
 - Regional synchro-phasor demonstration
- Underground compressed air energy storage demonstration



Full system deployment

- PG&E extends current pilots to full-scale roll-out, assuming benefits and technology are proven
- PG&E's industry-leading smartmeter deployment allows it to be at the leading-edge of other smart-grid technology deployments
- Insights are used to feed the next cycle of the technology deployment cycle